

Notice of Allowability

Application No.

10/804,322

Examiner

Deborah Malamud

Applicant(s)

WANASEK, KEVIN A.

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Supplemental Amendment, dated 8/31/06.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 8/30/06.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other See Continuation Sheet.

Continuation of Attachment(s) 9. Other: FAX of amended status, dated 8/31/06.

DETAILED ACTION

1. The examiner acknowledges the amendments received 23 June 2006. Claims 1-24 are pending.
2. The examiner further acknowledges the Supplemental Amendment dated 31 August 2006, updating the status of claims 17 and 24.

Double Patenting

3. In view of the amendments to the claims, the examiner withdraws the provisional rejection of claims 1,4, 7-9, 11, 15, 16, 17, 22 and 23 under the judicially created doctrine of obviousness-type double patenting.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Due to the amendments to claim 1, the rejection under 35 U.S.C. 102(b) of claims 1, 5 and 7-8 as being anticipated by Keimel (U.S. 5,163,427) is withdrawn.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. In view of the amendments to claims 1-3, 11-12,17-19 and 24, the rejections under 35 U.S.C. 103(a) of claims 2 and 3 as being unpatentable over Keimel (U.S.

Art Unit: 3766

5,163,427) in view of Belt (U.S. 4,436,093); of claims 4, 9, 11, 13, 15-17, 20 and 22-23 as being unpatentable over Keimel (U.S. 5,163,427) in view of Stemple (U.S. 4,566,457); of claim 6 as being unpatentable over Keimel (U.S. 5,163,427) in view of Kuck et al (U.S. 5,921,923); of claim 10 as being unpatentable over Keimel (U.S. 5,163,427) in view of Belt (U.S. 4,436,093) in further view of Kuck et al (U.S. 5,921,923); of claims 12, 14 and 21 as being unpatentable over Keimel (U.S. 5,163,427) in view of Stemple (U.S. 4,566,457) in further view of Kuck et al (U.S. 5,921,923); of claims 18-19 as being unpatentable over Keimel (U.S. 4,163,427) in view of Stemple (U.S. 4,566,457) in further view of Belt (U.S. 4,436,093); and of claim 24 being unpatentable over Altman et al (U.S. 4,726,379) in view of Keimel (U.S. 4,163,427) are withdrawn.

Allowable Subject Matter

8. Claims 1-24 are allowed.

9. The following is an examiner's statement of reasons for allowance: Claim 1, as amended, is a medical device for delivering a pulse waveform to a target site of a patient, comprising an energy storage device storing electrical energy; a plurality of electrodes electrically coupled to the energy storage device; and control circuitry, coupled to the energy storage device and the plurality of electrodes, generating the pulse waveform from the stored energy and delivering the pulse waveform to the target site via the plurality of electrodes, wherein the pulse waveform corresponds to multiple phasic signals delivered simultaneously to multiple pathways between the plurality of electrodes; wherein the multiple phasic signals are out of phase by a predetermined

Art Unit: 3766

phase shift. Claim 11, as amended, is a medical device for delivering a pulse waveform comprising multiple signals to a target site of a patient, comprising an energy storage device storing electrical energy; a plurality of electrodes electrically coupled to the energy storage device; a first pair of switching elements associated with a first electrode of the plurality of electrodes to provide a plurality of output pulses corresponding to a first signal of the multiple signals output at the first electrode; a second pair of switching elements associated with a second electrode of the plurality of electrodes to provide a plurality of output pulses corresponding to a second signal of the multiple signals output at the second electrode; a third pair of switching elements associated with a third electrode of the plurality of electrodes to provide a plurality of output pulses corresponding to a third signal of the multiple signals output at the third electrode; and control circuitry controlling the switching elements in a predetermined pattern to generate the pulse waveform as multiple phasic signals delivered simultaneously to multiple pathways associated with the plurality of electrodes; wherein the multiple phasic signals are out of phase by a predetermined phase shift. Claim 17, as amended, is a method of delivering a pulse waveform to a target site of a patient, comprising generating a plurality of output pulses corresponding to each of a plurality of electrodes; and controlling switching elements associated with each of the plurality of electrodes in a predetermined pattern to generate the pulse waveform as multiple phasic signals delivered simultaneously to multiple pathways associated with the plurality of electrodes; wherein the multiple phasic signals are out of phase by a predetermined phase shift. Claim 24, as amended, is a computer-readable medium having computer-

Art Unit: 3766

executable instructions for performing a method, comprising generating a plurality of output pulses corresponding to each of a plurality of electrodes; and controlling switching elements associated with each of the plurality of electrodes in a predetermined pattern to generate the pulse waveform as multiple phasic signals delivered simultaneously to multiple pathways associated with the plurality of electrodes; wherein the multiple phasic signals are out of phase by a predetermined phase shift.

10. As has been stated in previous Office actions, it is well known in the art to provide an apparatus and a method for delivering pulse waveforms simultaneously to different electrodes in various locations within the body. These waveforms are generated by energy storage devices, and controlled by switching elements. However, it is neither taught nor suggested in the art to provide multiple signals that are out of phase by a predetermined phase shift to each of these electrodes.

11. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

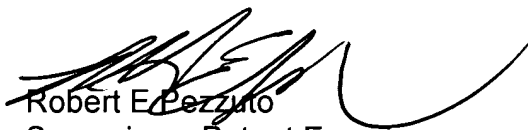
Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Malamud whose telephone number is (571) 272-2106. The examiner can normally be reached on Monday-Friday, 9.00am-5.30pm.

Art Unit: 3766

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571)272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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